A REVISION OF THE FUR MITES MYOBIIDAE (ACARINA). (Suite)

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Radfordia lemnina (Koch, 1835)

Dermaleichus lemninus Koch, 1835 Crust. Myr. Arach. 33: 5. Myobia lemnina (Koch, 1835) Poppe, 1896 Zool. Anz. 19: 508, 332. Radfordia lemnina (Koch, 1835) Ewing, 1938 Proc. ent. Soc. Wash. 40: 7,186.

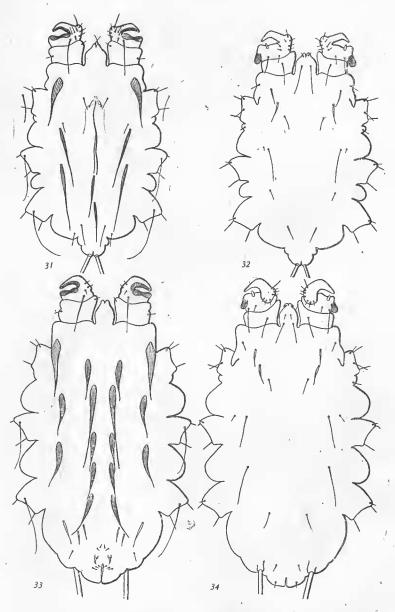
The male dorsum (fig. 31) has lateral spines I broad at base, striated, lying midway between eoxae I and II, extending to lateral spines II; lateral spines II long, slender, striated, extending from midway between coxae II and III, reaching coxae IV; lateral spines III level with middle of coxae III, extending beyond posterior edge of coxae IV. Sub-median spines I and II anterior to the genital pore which is level with coxae II. Sub-median spines III anterior to bases of lateral spines II. Median spines I posterior to coxae III, long, slender; median spine II level with coxae IV and reaching almost to the posterior end of body; two pairs of long simple spines are placed anterior to the terminal bristles.

The male venter (fig. 32) has two pairs of spines on the eapitulum; one pair of simple spines anterior to coxac II on the lateral edge of body; anterior to coxae II is a pair of expanded spines with a second pair level with coxae II. A hook-like process lies anterior to coxac II; betwenn coxae II and III is a pair of long spines flanked laterally by a pair of smaller spines. Between coxac III and IV is a pair of small spines; level with posterior edge of coxae IV is a pair of long spines. Tarsus II with two short claws; tarsus III and IV each with

one long claw.

The female dorsum (fig. 33) has lateral spines I broad near their base, tapering, striated, extending posteriorly to lateral spines II; lateral spines II sub-similar, placed between coxae II and III; lateral spines III posterior to coxae III; lateral spines IV posterior to coxae IV, long. stout. Sub-median spines I level with middle of coxae II, striated; sub-median spines II posterior to eoxae II, more than twice the length of preceding pair, striated, extending almost to anterior edge of eoxae IV; sub-median spines III level with middle

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Radfordia lemnina (Koch, 1835). Fig. 31, 3 dorsum. — Fig. 32, 3 venter. — Fig. 33, ♀ dorsum. — Fig. 34, ♀ venter.

of coxae III; sub-median spines IV midway between coxae III and IV; sub-median spines V level with middle of coxae IV, longer than submedian spines I, III and IV. Anterior to genital pore are two lines, each of four spines, the spines of the anterior row being the longer and stouter. Genital pore flanked by a pair of spines and the genital claws. Flanking the anus are three pairs of small spines.

The female venter (fig. 34) has the chaetotaxy somewhat similar to that of the male, with two additional pairs of spines on posterior end of body between the terminal bristles. Tarsus II with two short

claws; tarsus III and IV each with one long claw.

Type host: Field vole (*Microtus agrestis hirtus* Bellamy). Ewing (1938) p. 186) reports taking this species on the mouse (*Microtus pennsylvanicus*) at College Park, Maryland, U. S. A. April 6, 1932.

Type locality: ? Common on type host throughout its range. Measurements: $30.27 \text{ mm} \times 0.17 \text{ mm}$; $90.32 \text{ mm} \times 0.19 \text{ mm}$.

Radfordia brevihamata (Haller, 1882)

Myobia brevihamata Haller, 1882 Jahrs. Ver. vaterl. Naturk. Wttbg. p. 312.

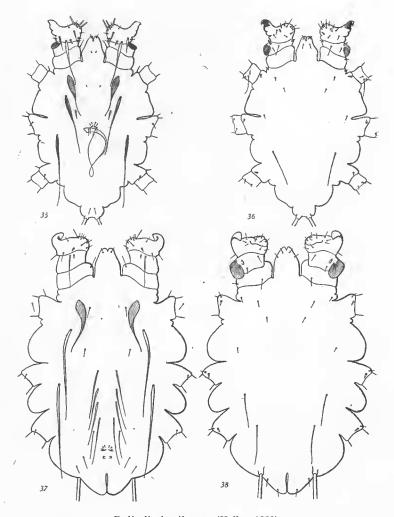
The male dorsum (fig. 35) has three stout, blunt spines and a stout, thorn-like spine on the inner margin of legs 1; the posteriorly

directed spine is exceptionally stout and long.

Lateral spines I broad, striated, level with anterior edge of coxae III, reaching backwards to coxae III; lateral spines II narrower, striated, longer and reaching almost to coxae IV; lateral spines III level with posterior edge of coxae III wider apart than lateral spines I and II, extending to the caudal lobe. Sub-median spines I minute, level with coxae II, posterior to bases of lateral spines I; sub-median spines II anterior to coxae III, of moderate length, stout. A pair of spines is present on the caudal lobe. Genital pore level with coxae III; anterior to the pore is a transverse row of four spines also a second row of six spines; flanking the pore are two pairs of long spines. Penis whip-like, broad at base and tapering to a long, slender point.

The male venter (fig. 36) has a stout, thorn-like spine on coxae II, III and IV; a pair of spines anterior to coxae II; two pairs of spines level with coxae II; a pair of spines anterior to coxae III; a pair-of long stout spines between coxae III and IV. Tarsus II with two unequal claws; tarsus III and IV each with one long claw.

The female dorsum (fig. 37) has lateral spines I level with anterior edge of coxee II, broad at base, striated longitudinally, extending almost to coxee III; lateral spines II lying posterior to coxee II, long, not foliate, extending to coxee IV; lateral spines III level with posterior edge of coxee III, extending to the posterior end of body.



Radfordia brevihamata (Haller, 1882). Fig. 35, ♂ dorsum. — Fig. 36, ♂ venter. — Fig. 37, ♀ dorsum. — Fig. 38, ♀ venter.

Submedian spines I posterior to the level of lateral spines I, short, simple; sub-median spines II anterior to coxae III; sub-median spines III level with coxae III long slender, extending to coxae IV; sub-median spines IV and V between coxae III and IV; sub-median spines VI level with coxae IV; sub-median spines VII level with posterior edge of coxae IV, shorter than the four preceding

pairs of spines. Between sub-median spines VII and posterior end of body are two pairs of small spines. Genital pore posterior to coxae IV; anterior to the pore there is a transverse row of four spines; posterior to the pore are two pairs of small spines and the genital claws.

The female venter (fig. 38) has a pair of spines anterior to coxae II; a pair of spines level with the anterior and a pair of spines level with posterior edge of coxae II; a pair of spines anterior to coxae III; midway between coxae III and IV is a pair of long spines; a pair of longer spines level with coxae IV and four small spines on the caudal lobe. On coxae II, III and IV there is a stout, thorn-like spine as in the male. Tarsus II with two unequal claws; tarsus III and IV each with one long claw.

Type host: A mole (Talpa europaea L.)

Type locality: ? Common on type host througout its range.

Measurements: ♂ 0.29 mm × 0.19 mm; ♀ 0.43 mm × 0.26 mm. Remarks. Although Poppe (1896) states that this species has only one claw on tarsus II, III and IV and Ewing (1938) that the species is proper to the genus *Myobia* von Heyden, 1826 I find that there are, in fact, two claws on tarsus II, and feel confident the former authors have overlooked the second claw which is not always apparent. Feeling dubious on this question of one or two claws on tarsus II I remonted the specimens in my collection, which were originally in Gum Chloral (De Faures). Upon remounting in Polyvinyl Aleohol (Du Pont Rh. 349 Low Viscocity) plus Lactic Acid — Phenol, the secondary claw at once became apparent.

(à suivre).

ERRATUM

in key to the genera of Myobiidae (Bull. Mus. Paris, t. XX, fasc. 5, 1948, p. 461):

1. Leg I with five segments and tarsal claw; tarsus II, with two claws.....

au lieu de: 2, lire...... 5.